Armament Division



Joint Small Arms Systems

National Defense Industrial Association (NDIA)

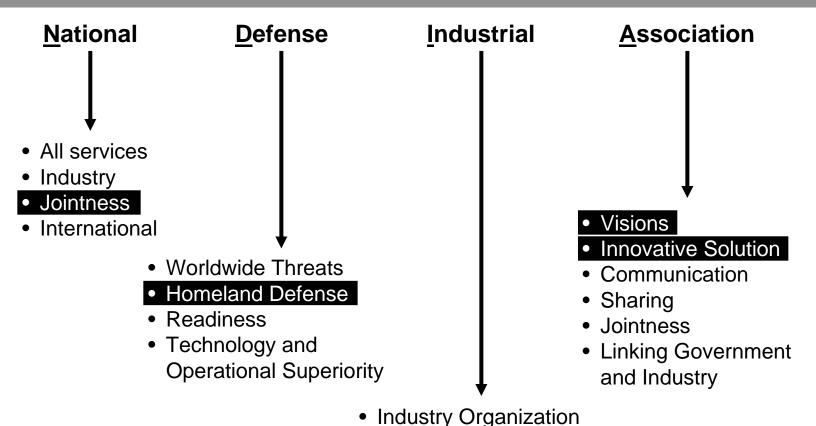
Armament Division

2006 Division Status

15-18 May 2006

The Links – Who, What, Why





An Organization Ensuring Strength Through Industry and Technology

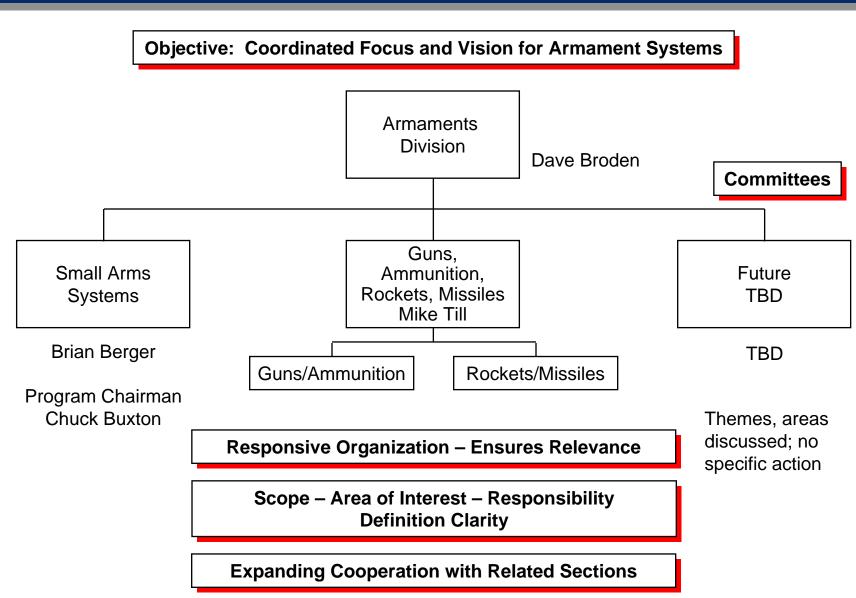
Resources

Spokesman for Industry

Capability/Readiness

Leadership





Committee Focus for Symposium Attendees



- Selecting a Theme--- Relevant, Timely, and with a Vision
- Including keynoters and presentations that <u>communicate effectively</u> to inform and challenge the attendees
- Offer <u>opportunities for attendee participation</u> thru questions, panels, exhibits, demonstration, and networking.
- Address <u>status of present capability</u> while building <u>awareness of evolving</u> need, new technology, and new systems.
- Providing the framework for technology, system, or capability opportunities to enable meeting the Joint Service needs.

Small Arms Systems



Meeting the Needs of Our Joint Ground Forces in the Fight Against Terrorism and Developing the Tools for Future Combat

Address and Focus on the Theme

DoD and Homeland Defense Capabilities

- Joint Force operations and capability
- Response to asymmetric threats
- Adapt systems and technology for operational flexibility Jointness
 - Responsiveness

- Push technology envelope(s)
- Push integration efficiencies
- Add functional capabilities
- Introduce new systems
- Ensure readiness and capability

"Lessons Learned" — Readiness/Capability — Responsive Force — Jointness — Technology Change

Shape the Future — **Enable the Force**

Linking to Theme



Meeting the Needs—Enabling Forces—Defeating Terrorism-Future Tools for Combat ■

- Understanding the Need
- Joint Requirement(s)
- Requirements Pull
- Technology Push
- Readiness/Capability/Responsiveness
- Direct Integration
- System Integration Adaptations
- Spiral Development
- Supportability

- Threat Specific Solutions vs. Capability Driven and Adaptable
- Operational Flexibility and Responsiveness
- Industrial Base Readiness
- Spiral Development

Response to Symposium Theme

Adaptable, Innovative, Visionary, Capability Focused

Committee Scope



Small Arms Systems

- Individual weapon(s)
- Crew served weapon(s) (e.g., ≤ 40mm)
- Lightweight Systems
- Ammunition
 - Enhanced/lightweight
 - "Green"
- Full life cycle management
- Supportability
 - Training
 - Logistics
- Target Acquisition/Fire Control System (TA/FCS)
- Remote Stabilized Turret System
- System Integration
- Networked capabilities
- Non lethal
- Homeland Defense systems

Gun and Missile Systems

Guns and Ammunition

- Medium caliber systems
- Tank systems
- Mortar systems
- Artillery systems
- Naval gun systems
- Aircraft/helicopter systems
- Precision systems
- Platform Integration
- Manned/robotic applications
- System integration
- TA/FCS
- Supportability
- Life cycle management
- Stabilized Turret System

Missiles and Rockets

- Tactical missiles and rockets
- Shoulder Fired Systems
- Ground launched
- Aircraft/helicopter launched
- Precision Systems
- System Integration
- Manned/robotic applications
- Life cycle management

Synergism

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Commonality

Common Enabling Technologies, Modeling/Simulation, Man-Tech

Links to Other Committees

Small Arms Systems Vision Forward



- •Maintaining strong Small Arms community of government, industry, academia etc. focused to ensuring the technology, systems, and capabilities are state of art, ready, and responsive and linked to joint service needs—R&D and Production
- •A forum for <u>addressing and communicating changes</u> in requirements, evolving technologies, and new systems—
- •Continuing the tradition of Small Arms Systems focus on weapons and ammunition and adding the "new"—full system vision of fire control, networks, smart capabilities that enable the small arms user to do his job better
- •Enabling the Small Arms community a forum with opportunity for networking resulting in co-operation, sharing, and understanding

Armament Division Forward Vision



Symposium Program Content Focus

Balance Program Presentations

Vision of The Future—Requirements, Technology, Systems Discussion of Current Activities, Needs, Issues Include Enabling Technologies and Systems

Increase Industry Presentations of Current, Evolving and Future

Technology

Systems

Industrial Base

Ensure Communication of Industry Initiatives and Innovation

- Symposium Attendee Input on Topics of Interest
- •Executive Committee Initiatives to Seek Presentations on Key Topics

Armament Division Focus Topics



1. Ensuring Capability for the Warfighter

Current Systems
Refurbishment/Repair
Expendables

2. Responding to Urgent Technology/System Needs

"Lesson Learned" Responses
Adapting to New Threats and Conditions

3. Maintaining and Adapting the Industrial Base

DOD Organic Base Industrial Base Helping to shape the future capability

4. Establishing and Transitioning New Technology and Systems

Requirement Process Effectiveness
Addressing Total System Integration Descriptions
Program Decision Milestones
Schedules/Spiral development and Technology Insertion
Funding

Armament Division Focus Topics (continued)



5. Understanding Budgets and Funding

Shaping Development Plans leading to New Systems Maintaining Production to ensure Readiness

6. Transitioning the Workforce

Attention to DOD Technical Manpower Study-Mentoring effectively
Enabling the entry Workforce—Ensuring skilled resources

7. Evolving New Technology To Readiness for System Applications

Understanding the Need

"Maintaining Innovation" thru effective Industry and Government investments

Establishing vision of Small Arms Systems in the Future

- 8. Maintaining Technical Data Packages (TDP's) and related data to ensure timely and quality production
- 9. Increasing Executive Committee representation of all services

Bottom Line



NDIA Focus → Responsive to Industry/DoD Community → Ensures Relevance

Addressing Issues Critical to Small Arms Systems— Supporting Joint Service Objectives

Armament Division Focus

- Expanded participation
- Resource for government and industry
- Linked to key DOD and service strategies
- Capture "lessons learned" → ensure readiness → shape future
- Encouraging leverage of complementary systems
- Effective use of exhibits, demonstrations, and tours

Establishing Vision for 21st Century Relevance

Applying System Synergism to Meet Transformation Goals

2006 Symposium



Guns and Ammunition

Rockets and Missiles

Enhancing Our Capability and Evolving for Tomorrow

Addressing the Theme!

- Joint Capability
- Joint Requirements
- Readiness Capability

Applying Common Advanced Technologies and Integrated Systems

- Capability focused complementary integrated systems
- Strengthening Legacy Systems while evolving "new"
- Address key force multipliers
 - PrecisionSituation awareness
 - MobilityLethality
 - Communication
- Planning and implementing Spiral Development

- Building on "lessons learned" for future readiness
 Priority to supporting the Warfighter
- Ensuring responsive industrial base capability
- Attention to life cycle management

Enabling an Integrated Joint Force Capability

Symposium Attendance Realizing Growth



- Gun and Missile Systems
 Attendance---350-500 in last 5 years
- •Small Arms Systems

Attendance—400-550 in last 5 years

Expanded Participation

New Attendees and repeat attendees

Attendee Comments Impacting Program Content

Growth of Exhibits

Continued International participation

- Interest and Activity Continues to Grow
 - Armament Division meets Needs of Government and Industry

Symposium Observations



Linking NDIA and DoD Realized

- Improved <u>links</u> to DoD and service <u>thrusts</u> and <u>initiatives</u>
- Interest in "after action reports" "<u>lessons learned</u>" → <u>industry</u>
 responsiveness → <u>addressing challenges</u>

Symposium Quality and Communication Demonstrated

- Presentation <u>quality</u> improvements and "So What" <u>benefit messages</u> have <u>added value</u>
- Focused interest in systems level presentation vs. technology unless technology offers payoff vision
- <u>Industry adjusted</u> to intellectual property concerns and expanded participation positively
 - Industry worked with vision

Armament Division Success



Guns and Ammunition/Missiles and Rockets

Small Arms Committee

Value Added Has Been Demonstrated

Leadership to Strengthen the Armament Community

Challenge: Applying Technology, Systems for Future Force

Ensuring Readiness Responding to the Challenge Advancing Superior Capability

Symposium Benefits Confirmed

Increasing Interest/Participation

2006 Armament Division Highlights



Leadership for National Small Arms Consortium and Center

Executive Committee

Research Committee and Subcommittees

- Participation in Industrial Base Status and Needs Briefings
 Communication of Situations, Changes and Actions
- Armament Division Executive Committees demonstrated Leadership

Multiple Meetings

Expanded Participation

Shaping the Future

 NDIA Armament Division Contacted by Government and Industry for expertise to address specific needs---

Talent and Experience benefited specific activity

2006 Armament Division Highlights



- Symposium Attendance Strong and Growing
- Symposium Exhibits Effective and Quality Enhanced
- Integration of Guns and Ammunition and Rockets and Missiles provides strong system and technology synergism—realizing benefits
- Executive Committee activity strengthened an increased
- Government and Industry Partnership in Division leadership demonstrated

Armament Division leadership strength enables strategic focus to address current and future needs

NDIA International Symposium Links



Objective:

International cooperation and integration of symposiums benefiting industry and Department of Defense to encourage partnerships for development, production, and interoperability

- **Approach:** Coordination of NDIA Armament Division programs with "Symposium at Shrivenham" The Royal Military College of Science
 - Common presentations and panel participants is a strong "open door" resource

European Small Arms and Cannon Symposium 22-24 August 2006

2006 Top Defense Issues



- Issue 1: Sustain the Defense Industrial Base
- Issue 2: Sustain Overall Military Readiness While Continuing the Global War on Terrorism and Preparing for Future Defense Transformation
- Issue 3: Improve the Integrity and Responsiveness of the Acquisition Base
- Issue 4: Improve Small Business Opportunities
- Issue 5: Strengthening the National Security Workforce

NDIA Board of Directors Approved Focus

Established by Government Policy Advisory Committee

Look to Web Site for Full Details

These Issues are NDIA Membership Voice to Congress

NDIA Communications



- National Defense Magazine
 - Emphasis on relevant and timely topics
 - Frequently source of media, DoD, and Congressional reference
- Website
 - Symposium presentations available attendee access
 - Complementary information
 - Full list of activity
- Top public policy issues prioritized addressed to Congress strengthen the community

NDIA Messages and Content Has Impact

and

Website Used Extensively as Resource

Armament Division 2006 Challenges



- Ensuring Symposium Presentations offer <u>"Value Added"</u> content
- <u>Focusing Symposium Topics</u> to address—"Critical—Relevant—Priority subjects
- •Enabling <u>communications</u> of evolving Small Arms technology, systems, and operational integration
- Evolving <u>Symposium/Exhibit format</u> to enhance communication and understanding ---apply innovation effectively
- Integrating Symposium Format enabling <u>Attendee input and interaction</u>—use new presentation formats and technology
- Providing individual <u>expertise</u> in response to requests for support
- •Matching <u>Attendee topic interest</u> to the program structure---Solicit topics of interest as well as presentations when issuing call for papers.
- Become recognized as a <u>resource to go</u> to for "Problem solving" or assessing needs or alternatives--- support special studies.

Leadership Vision



NDIA Armament Division Is:

- A <u>relevant</u> voice and forum
- Responsive to DoD community and industry challenges
- A forum for DoD/industry <u>interaction discussion</u> of "lessons learned" and needs
- <u>Supporting</u> national defense through people resources, networking, and symposiums
- <u>Transforming</u> to ensure relevance to changing military, geopolitical environments, technology, and industrial base resources

The NDIA Community is the Resource of Choice For Excellence in National Defense Topics/Communications









